# SERVICE MANUAL

## T6.120 / T6.140 / T6.150 / T6.155
## T6.160 / T6.165 / T6.175
## T6.140 AutoCommand / T6.150 AutoCommand
## T6.160 AutoCommand

Tractor

Part number 47665868
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NEW HOLLAND AGRICULTURE

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# Accumulator - General specification

| | |
|---|---|
| Precharge pressure | **130 bar (1885.0 psi)** |
| Maximum working pressure | **210 bar (3045.0 psi)** |



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| Problem | Possible Cause | Correction |
|---|---|---|
| **Insufficient cooling Gauge reading : Low Pressure - Low High Pressure - High (Refer to example Air conditioning - Test (50.200)).** | Restriction in liquid line. | Discharge the system.<br>Replace the receiver/drier.<br>Inspect all lines and tubing from compressor outlet to expansion valve.<br>Replace if needed.<br>Evacuate the system.<br>Charge the system.<br>Re- test the system. |
| **Insufficient cooling Low pressure reading does not fluctuate with changes in temperature control switch (pressure should drop until compressor cycles). Evaporator air not cold. Gauge reading : Low Pressure - Normal High Pressure - Normal (Refer to example Air conditioning - Test (50.200)).** | System low on charge. Air or moisture present in system. | Perform a leak test.<br>Discharge the system.<br>Repair the leaks.<br>Replace the receiver/drier.<br>Check the oil level.<br>Evacuate the system.<br>Charge the system.<br>Re- test the system. |
| **Low pressure switch cutting out. Gauge reading: Low Pressure - Low High Pressure - Low (Refer to example Air conditioning - Test (50.200)).** | Stuck valve | 1. Check expansion valve as follows:<br>Set at maximum cooling.<br>Low pressure gauge should drop slowly.<br>2. If expansion valve is defective:<br>Discharge the system.<br>Replace the expansion valve.<br>Evacuate the system.<br>Charge the system.<br>Re- test the system. |
| **Expansion valve to evaporator tube shows considerable condensation or frost. Gauge reading: Low Pressure - Low High Pressure - Low (Refer to example Air conditioning - Test (50.200)).** | | 1. Check expansion valve as follows:<br>Set at maximum cooling.<br>Low pressure gauge should drop slowly.<br>2. If expansion valve is defective:<br>Discharge the system.<br>Replace the expansion valve.<br>Evacuate the system.<br>Charge the system.<br>Re- test the system. |
| **Too cold to touch. Gauge reading: Low Pressure - Low High Pressure - Low (Refer to example Air conditioning - Test (50.200)).** | | 1. Check expansion valve as follows:<br>Set at maximum cooling.<br>Low pressure gauge should drop slowly.<br>2. If expansion valve is defective:<br>Discharge the system.<br>Replace the expansion valve.<br>Evacuate the system.<br>Charge the system.<br>Re- test the system. |



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# Wire harnesses - Electrical schematic frame 48 LOADER READY (Interface)

**T6.140 - 160 AutoCommand**

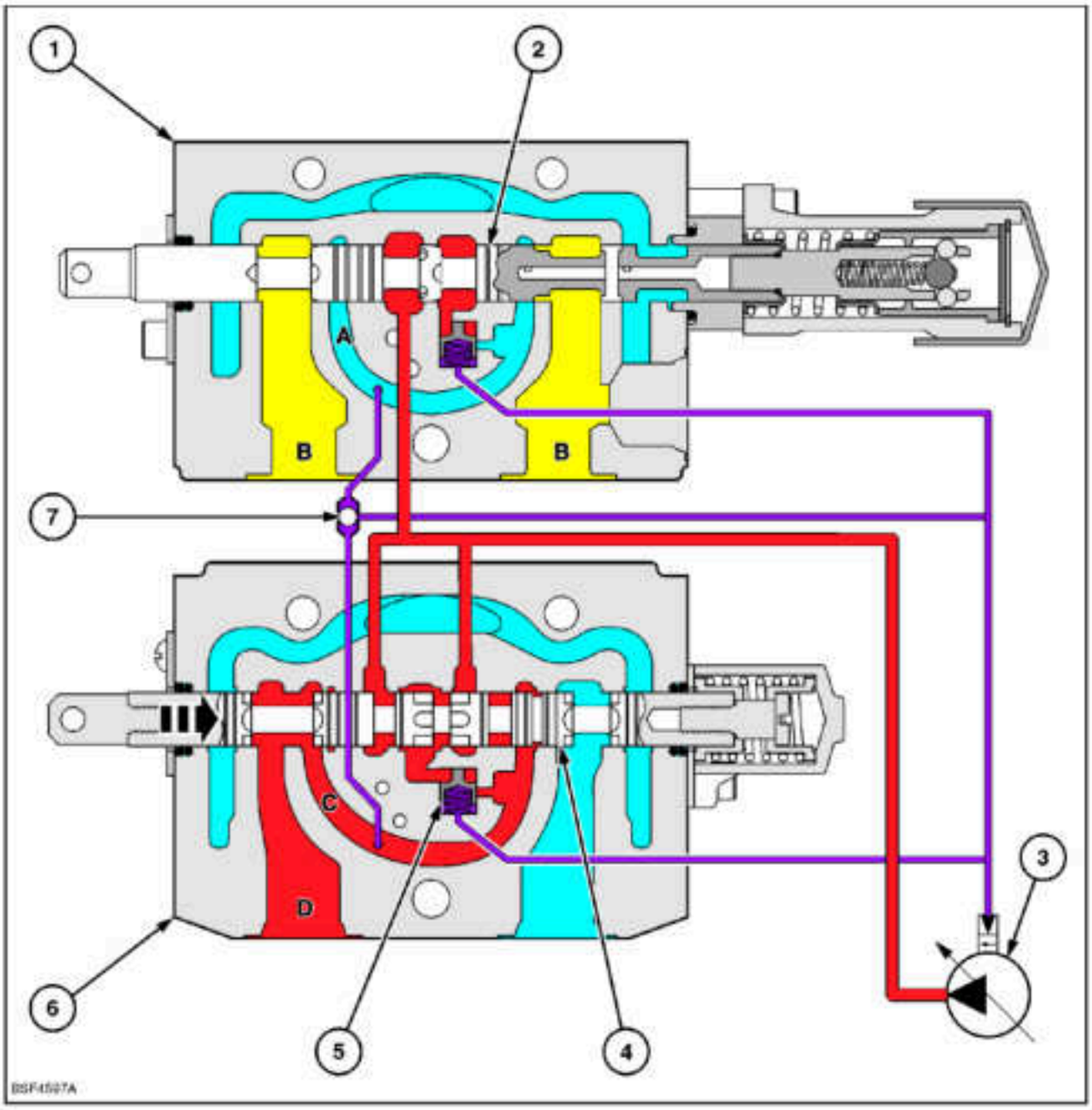
| Component | Connector | Description |
|---|---|---|
| A-080 | **X952** | Universal Controller (UCM) |
| K-055 | **X491** | Relay 1 (Front Loader) |
| K-056 | **X492** | Relay 2 (Front Loader) |
| Additional Connectors:<br>**X024, X082, X084, X085, X086, X210, X211, X212, X493, X494** | | |

| Wire Color Codes | | | |
|---|---|---|---|
| **BK** Black | **GN** Green | **PK** Pink | **BL** Blue |
| **TN** Light Brown | **BR** Brown | **OR** Orange | **LG** Light Green |
| **RD** Red | **GY** Grey | **LB** Light Blue | |
| **WH** White | **YE** Yellow | **VT** Violet | |



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BSF4597A 1

High Pressure Circuit Oil

Load Sensing Pressure Oil

Return To Reservoir Oil

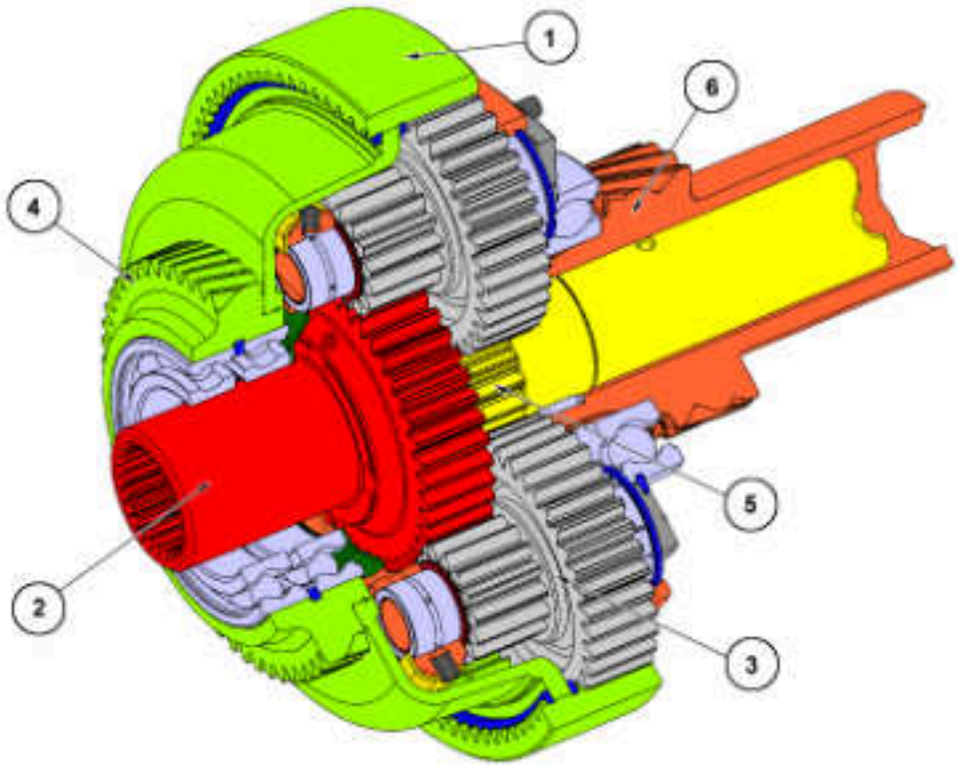
Trapped Oil

1 Control Valve with Detent (Boom)
2 Boom Spool
3 Pump
4 Bucket Spool
5 Compensator
6 Control Valve less detent (Bucket) Valve
7 Load Sense Shuttle Valve



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## Summation planetary gears




The summation planetary gears have two input shafts and two output shafts.

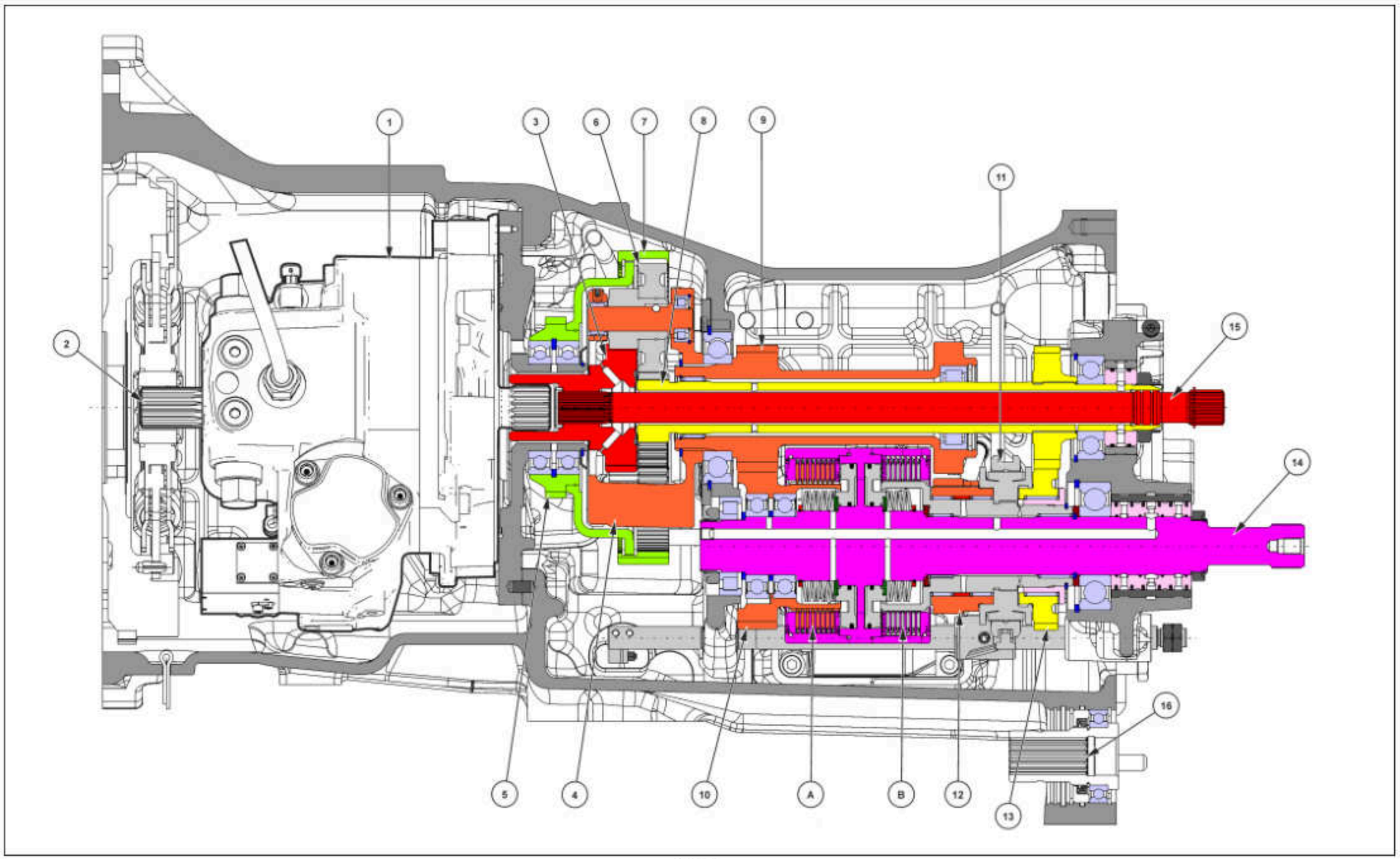
In a figurative sense, the sun gear **(2)** and the ring gear **(1)** are the two input shafts. The planetary gear carrier **(6)** and the sun gear **(5)** each have a secure connection to an output shaft.

The spur gear **(4)** drives the ring gear **(1)** directly from the hydro motor. The combustion engine drives the sun gear **(2)** directly. From the three double planetary gears **(3)**, the drive power transfers either via the planetary gear carrier **(6)** or via the sun gear **(5)** to the corresponding output shaft.

With the aid of the two output shafts, two continuously variable forward gears and one continuously variable reverse gear are possible in conjunction with the synchronizer and the clutches **(A)** and **(B)**. This enables the operator to implement all requirements (large tractive effort, high top speed, the necessary gear spread and excellent efficiency).



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